00-K-1621

Muller
FAV

TRANSMITTAL FORM FOR LEGISLATION

TO: MAYOR'S OFFICE **ATTN: GREG PRIGDEON**

9/28/00

Commissioner's Signature

Director's Signature

Originating Department: Public Works

Contact Person: Keith Brooks X 6382

Committee(s) of Purview: City Utilities

Council Deadline: September 26, 2000

Committee Meeting Dates(s): October 10 and 11, 2000

Full Council Date: October 16, 2000

CAPTION:

A RESOLUTION AUTHORIZING THE MAYOR TO ENTER INTO AMENDMENT AGREEMENT NO. 4 WITH ADS ENVIRONMENTAL SERVICES, INC., FOR FC-6244-95A, ANNUAL CONTRACT FOR INSPECTION AND FLOW MEASUREMENT OF COMBINED SEWERS AND SANITARY SEWERS ON BEHALF OF THE DEPARTMENT OF PUBLIC WORKS IN AN AMOUNT NOT TO EXCEED FOUR HUNDRED NINETY-SEVEN THOUSAND SEVEN HUNDRED SIXTY-ONE DOLLARS ($497,761.00); ALL CONTRACTED WORK SHALL BE CHARGED TO AND PAID FROM FUND, ACCOUNT AND CENTER NUMBER: 2J26 524001 M24I02239999.

BACKGROUND:

THIS AMENDMENT WILL PROVIDE FOR INFORMATION FOR SEWER SEPARATION CONCEPTUAL DESIGN AND COST EXTIMATE FOR THE WEST COMBINED SEWER OVERFLOW AREA..

FINANCIAL IMPACT (if any) **$497,761.00**

Mayor's Staff Only

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Received by Mayor's Office: _____ (date)

Reviewed by: _____ (initials) (date)

Submitted to Council: _____ (date)

Action by Committee: _____Approved _____Adversed _____Held _____Amended

_____Substitute _____Referred _____Other

RESOLUTION BY

CITY UTILITIES COMMITTEE

A RESOLUTION AUTHORIZING THE MAYOR TO ENTER INTO AMENDMENT AGREEMENT NO. 4 WITH ADS ENVIRONMENTAL SERVICES, INC., FOR FC-6244-95A, ANNUAL CONTRACT FOR INSPECTION AND FLOW MEASUREMENT OF COMBINED SEWERS AND SANITARY SEWERS ON BEHALF OF THE DEPARTMENT OF PUBLIC WORKS IN AN AMOUNT NOT TO EXCEED FOUR HUNDRED NINETY-SEVEN THOUSAND SEVEN HUNDRED SIXTY-ONE DOLLARS ($497,761.00); ALL CONTRACTED WORK SHALL BE CHARGED TO AND PAID FROM FUND, ACCOUNT AND CENTER NUMBER: 2J26 524001 M24I02239999.

WHEREAS, the City of Atlanta did enter into an Agreement with the Contractor for FC-6244-95A, Annual Contract for Inspection and Flow Measurement of Combined Sewers and Sanitary Sewers in an amount not to exceed Five Hundred Thousand Dollars ($500,000.00);

WHEREAS, the City of Atlanta did enter into Amendment Agreement No. 1 with ADS Environmental Services, Inc., For FC-6244-95A, Annual Contract For Inspection And Flow Measurement Of Combined Sewers and Sanitary Sewers in an amount not to exceed Three Million Five Hundred Thousand Dollars ($3,500,000.00); and

WHEREAS, the City of Atlanta did enter into Amendment Agreement No. 2 in an amount not to exceed Three Hundred Seventy Thousand Dollars ($370,000.00) for sewer evaluation surveys in the existing combined sewer systems to provide field information including the condition of the pipes and manholes, the location and extent of sanitary sewer connection, other utilities location and conflicts, and pipe elevations and locations for preparation of a sewer separation conceptual design and more accurate cost estimates; and

WHEREAS, the City of Atlanta did enter into Amendment Agreement No. 3 to increase the scope of services to provide for inspection of combined sewers in the East Side of the City of Atlanta in order to comply with the Consent Decree between the City of Atlanta and EPA/EPD/Plaintiffs. 4,000,000

WHEREAS, the Commissioner of the Department of Public Works and the Director of the Bureau of Purchasing and Real Estate have recommended Amendment Agreement No. 4 for FC-6244-95A, Annual Contract for Inspection and Flow Measurement of Combined Sewers and Sanitary Sewers to be executed with ADS Environmental Services, Inc., in an amount not to exceed Four Hundred Ninety-seven Thousand Seven Hundred Sixty-one Dollars ($497,761.00); and

THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF ATLANTA, GEORGIA, that the Mayor be and is hereby authorized to enter into Amendment Agreement No. 4 with ADS Environmental Services, Inc. for FC-6244-95A, Annual Contract for Inspection and Flow Measurement of Combined Sewers and Sanitary Sewers, Inc., in an amount not to exceed Four Hundred Ninety-seven Thousand Seven Hundred Sixty-one Dollars ($497,761.00); and

BE IT FURTHER RESOLVED, that the Director of Purchasing be and is hereby directed to prepare an appropriate Amendment Agreement for execution by the Mayor, to be approved by the City Attorney as to form.

BE IT FURTHER RESOLVED, that this Amendment Agreement No. 4 shall not become binding on the City, and the City shall incur no liability upon same until such contract has been executed by the Mayor and delivered to the contracting party.

BE IT FINALLY RESOLVED, that all services for said contracted work shall be charged to and paid from fund, account and center number: 2J26 524001 M24I02239999.

KOB (9/25/00)

CITY OF ATLANTA

BILL CAMPBELL
MAYOR

TECHNICAL SERVICES BRANCH
2440 BOLTON ROAD N.W. • ATLANTA, GEORGIA 30318
404 • 350-4950 • FAX: 404 • 350-4951

DEPARTMENT OF PUBLIC WORKS
Norman Koplon,P.E.
Interim Commissioner

David Peters, P.E
Interim Deputy Commissioner.

MEMORANDUM

TO: Felicia Strong-Whitaker, Director
Bureau of Purchasing and Real Estate

FROM: Tyler Richards TR
Public Works Manager

DATE: September 16, 2000

SUBJECT: Request for Notices to Proceed –
1. Annual Contract (ADS) - **FC-6244-95-A**
2. Annual Contract (W.L. Jorden & Co., Inc.) – **FC-6980-97**
3. Annual Contract (ASG) – **FC-6244-95-B**

Attached please find proposals and budgets for engineering services to meet the requirements of the CSO and SSO Consent Decree between the City of Atlanta and EPA/EPD/plaintiffs. The work will be split between three consultant contracts as follows:

1. Inspection and Flow Measurement of Combined Sewers and Sanitary Sewers Annual Contract with ADS – **(FC-6244-95-A)** Sewer system evaluation to provide information for sewer separation conceptual design and cost estimate for West CSO area. **$497,761.00**

2. Inspection and Flow Measurement of Combined and Sanitary Sewers Annual Contract with ASG – **(FC-6244-95-B)** Sewer system evaluation to provide information for sewer separation conceptual design and cost estimate for West CSO area. **$497,761.00**

3. Surveying & Mapping Services Contract with W.L. Jorden & Co., Inc. – **FC-6980-97** Development of GIS decision & information management framework to assist with

decisions regarding CSO remediation alternatives and sewer system improvements including sewer separation, sewer remediation, and sewer capacity. **$1,504,478.00**

Sewer separation is an alternative that is being considered for the combined sewer system in Atlanta. West Atlanta includes the combined sewer area that drains into the Chattahoochee River through Peachtree Creek. A preliminary costs estimate for complete and partial sewer separation is currently being developed. This estimate is based upon available information and mapping which was not field verified. The work proposed here will include sewer evaluation surveys in the existing combined sewer system to provide current field information including the condition of the pipes and manholes, the location and extent of sanitary sewer connections, other utilities locations and conflicts, and pipe elevations and locations for preparation of a future sewer separation conceptual design and much more accurate cost estimates. This information will be input into the alternatives evaluation of the CSO Remedial Measures Plan being prepared for compliance with the CSO Consent Decree to identify a long term control plan.

This work is a continuation into the West CSO area of the initial phase of a cooperative effort with the Department of Public Works and Department of Planning to prepare a holistic watershed plan for combined sewer separation for the East Area CSO system which will include complete or partial sewer separation, stormwater controls, land use planning and community enhancements.

Funding for this project is available and will be paid out of the following account:
2J26 773001 M24I02239999

Thank you for your assistance. If you need any additional information, please call me at (404) 350-4959 or (678)-232-6965.

cc Norman A. Koplon, P.E.
David W. Peters, P.E.
Bea Shell
Reggie Grant
Vivian Chapman

City of Atlanta
West Area GIS Based Decision Support System
A Watershed Approach

TASK 1 – Develop a GIS based Watershed Information Management and Decision Support framework.

GOAL: The Geographic Information System (GIS) decision & information management framework to be developed for the City of Atlanta department of Wastewater Services will be a decision support tool that will aid staff in deciding the best course of action with regard to sewer separation and storm water management. The system will capitalize on work developed for the East Side CSO area. The information to be included is outlined below. The system will be developed with ESRI software products (ArcInfo, ArcView, etc.).

Product: Integrated GIS framework for land use and infrastructure planning.

Subtask 1: Framework Development

1. Continuation of User Needs Analysis for the participating departments that will be using the GIS Decision Support System (Planning, Public Works and GIS as a minimum). This analysis will determine in detail the types of decisions that each department will make or would like to make and assess the types of models and decision methodologies that each uses to perform their respective functions.

2. Select common engineering and planning models (and/or developing new models, or creating applications for non-automated decision processes) to be integrated into the GIS environment.

3. Coordinate with the City with respect to the organization, physical location and updating responsibilities of the GIS data and themes created for this project as part of the implementation of GIS based Decision Support Framework.

Subtask 2: Combined Sanitary Sewer System Assessment

1) Compile stormwater system information from available records, mapping, GIS data, and previous studies on the combined sewers, and storm drainage systems in each sub-basin (structure locations, impervious surface quantification, existing and proposed greenway locations, drainage problems, creek locations, obstructions, and street inlet locations) into ArcInfo and ArcView.

2) Compile sewer system information from available records and studies. Information collected to include structure locations, invert elevations, pipe sizes, pipe capacities, connectivity, condition, flow meter location and data. This information will be compiled in ArcInfo and ArcView.

3) Prepare combined sewer system maps that identify locations of direct sanitary sewer connections and segments requiring rehabilitation, replacement or abandonment.

4) Input all CCTV information into ArcView CCTV data as done on the East Side GIS project.

5) Develop a separation cost per acre for the West CSO area. This will be accomplished by incorporating separation plans developed by CH2Mhill/TOC and modifications as necessary for input into GIS/Engineering models for deriving separation costs per acre. The effort will include: 1. An evaluation of existing system conditions; 2. Analysis of previous separation alternatives of combined sewer system; 3. Review of Sewer System Separation Alternatives; 4. Preliminary Engineering Report; 5. Support Public Involvement Program.

6) Perform spot survey work pertaining to verifying horizontal location and invert elevations of manholes. A line item amount for this work is established at $10,200.

7) Perform GPS (backpack units) work to define the coordinates of manholes located and TV'd by the CCTV crews. (does not include location work by the GPS crews).

Subtask 3: Planning: Land Use Assessment and Development Scenarios

1. Secure (preferably from the COA) recent orthophotography for the project area to be used as the base map. The orthophotography will have at least a three-meter pixel resolution. All subsequent coverages will be registered to the orthophotography base map.

2. Develop a Land Use component of the GIS Decision Support System that includes:

- Parcel polygon layer with attributed ownership records that include parcel ID, current use, current land class and current zoning as contained in the ownership database of the Fulton County Tax Assessors office. Parcel (tax map) layer to be obtained from the city in digital format with parcel ID's.
- Planning area, neighborhood planning units in the planning area and current development densities in the planning area.
- Existing transportation facilities including all streets (edge of pavement and easements) mass transit hubs and routes.
- Locations of ongoing and planned City projects such as street paving, streetscape projects, sidewalk improvement, greenway acquisition, bond program projects etc.

- Impervious surface quantification (by sub-basin and by parcel). (Depends on acquisition of orthophotography).
- Delineated sub-basins with hydrography features (streams, creeks, lakes), location of BMP sites and existing open space facilities.
- Landfill locations
- Brownfields locations
- Empowerment zone boundaries

3. Digitize or obtain from the COA the NPU maps that reflect the most recent land use goals in each NPU (by sub-basin).

4. Establish a system for identifying approved and proposed private development projects and city projects, establish probable development schedule and locate each project within the sub-basin. The location will show the parcels or groups of parcels that the proposed development will affect. In addition:

   - Assess the stormwater impacts of the proposed development
   - Assess the sewer capacity requirements of the proposed development
   - Assess the traffic impacts of the proposed development

5. Meet with GRTA, MARTA and GaDOT staff to identify proposed highway and Mass Transit projects, determine proposed schedules and locate each project in the GIS.

6. Digitize or obtain electronic file from COA NPU Future Land Use maps .

7. With the Future NPU Land Use plan, utilize the GIS Decision Support System to assess sewer capacity needs and stormwater effects of future land use scenarios.

8. Identify existing land uses that are potential water reuse consumers and establish water reuse consumption goals and target zones for future development. Identify policies and ordinances required too attract water reuse consumers.

Subtask 4: Storm Water Management and Water Quality Enhancement Alternatives Evaluation

1. Identify stormwater management problem areas within each sub-basin and assess magnitude of each.

2. Model the stormwater of each basin using XPSWMM and HDRLink (ArcView interface to XPSWMM). Develop the cost & profiles functionality in ArcView.

3. Evaluate the effectiveness of storm water management controls in each sub-basin with the GIS Decision Support System including a cost model to establish cost effective water quality improvement methods for each sub-basin.

4. Calculate non-point source pollutant loads attributable to the current and future land use scenarios of each sub-basin and identify suitable BMPs that have proven successful in removing pollutants.

5. Assess compatibility of conceptual plans for storm water management with sewer separation alternatives.

6. Image Analysis: Use panchromatic image analysis, using USGS 1993 DOQQ's and USGS 1999 DOQQ's, for visual interpretation, land use classification, change detection (tree coverage, impervious surface) with ERDAS software (Imagine, Orthobase). Determine sedimentation loading/accretion using image analysis.

Subtask 5: Education and Public Awareness Programs

1. Provide personnel, a laptop computer and projector in order to present the GIS watershed information system as part of the education and public awareness programs.

2. Provide GIS data for the COA Community Technology Initiative (ACTI) to serve the purposes of that program and to enhance public access to the GIS information subject to data limitations outlined by the Departments of Public Works and Planning. (The COA would need to purchase ESRI Internet software (Arc IMS or MO IMS) as part of an implementation and is not included in the budget summarized below.)

Budget: $1,504,478

Watershed Information Management and Decision Framework- West

	Principal	GIS Proj. Director	GIS Programmer	GIS CP	GIS CP	Staff I Engineer	Staff II Engineer	Engineer	Technician III	Survey Crew	Administr Asst.	Sub-T Labor
	120.00	95.00	140.00	65.00	65.00	85.00	78.00	65.00	55.00	85.00	41.00	
nework Development	0	390	100	120	120						40	$
ibined Sanitary Sewer System Assessment (see scope for engineering tasks)	20	160	450	740	740	600	600	1100	1000		40	$4
l Use Assessment and Development Scenarios	20	590	710	800	800				100		40	$2
lgmt & WQ Enhancement Alternatives	20	180	180	200	200	200	200	200			40	$1
ation & Public Awareness	10	140	0	160	160	160	160					$6
t Survey Work										120		$10,200
hours	70	1460	1440	2020	2020	960	960	1300	1100	120	160	
Subtotals	$8,400	$138,700	$201,600	$131,300	$131,300	$81,600	$75,840	$84,500	$60,500	$10,200	$6,560	
1 Labor Subtotal												$930,4

GIS Support Services	$	538,550
ubconsultant Fee	$	26,928
MBE Subconsultants	$	565,478
NSES		
Print Document	$	2,000
Plot Maps (Allowance)	$	2,000
Travelling (Allowance)	$	4,000
Photocopying (Allowance)	$	500
	$	8,500
TOTAL TASK I	$	1,504,478